

Improving a Website: The SciDev.Net Experience

Barbara Keating

SciDev.Net, 11 Rathbone Place, London W1T 1HR, UK.

barbara.keating@scidev.net

Abstract

This paper summarises a talk on how the Science and Development Network (SciDev.Net) redesigned their website to be a more effective tool of communication and interaction with its audience and correspondents in developing countries. It outlines how SciDev.Net's website and supporting content management system (CMS) have been developed to streamline the publication and content management process. This paper suggests how similar small publications and other organisations can develop simple yet effective content management systems to control the content and information on their website.

Introduction

We are all familiar with complaints about information presentation on the internet. Many websites can be messy and difficult to navigate. Useful information can be obscured by bad presentation. However, redeveloping a website is costly and time-consuming and many organisations find it difficult to devote significant resources to the task.

The Science and Development Network (SciDev.Net) is an organisation and website dedicated to news views and information about science, technology and the developing world. We have recently developed a bespoke system which is in tune with our workflow and a website which handles and displays our content more effectively. From this process, we have been able to extract some key tips for small organisations on how to develop their websites.

The SciDev.Net Experience

The overall aim of the Science and Development Network (SciDev.Net) is to enhance the provision of reliable and authoritative information on science- and technology-related issues that impact on the economic and social development of developing countries. We seek to achieve this objective primarily through running a free-access website, but also by building regional networks of individuals and institutions who share our goals, and by organising capacity-building workshops and other events in the developing world.

SciDev.Net has grown, so have the needs of our audience and the website needs to respond to this. The difficulty was balancing the need for more forms of content with a clean, easy to navigate site.

We identified the following problems with the existing content management system (CMS)

- It was restrictive and inflexible. Content could only be inputted from central office.
- The sequence of inputting data was counter-intuitive to how we worked which resulted in time consuming repetitive tasks

- The website could only be displayed within very defined parameters leaving no flexibility for adding new sections or highlight particular areas.
- In order to add new areas we had to create separate html pages which could not be linked to the CMS and therefore, content within those pages couldn't be linked to other parts of the site.

In terms of our front-end design, we were happy with how some content was presented but wanted the site to have a more polished look and feel. We also wanted to give greater prominence to dossiers and have the ability to highlight new items on our homepage. Our audience and the main focus of our website was to remain the same.

Here is a summary of some the more important changes to our site following our redesign:

- We redesigned the layout of our in-depth topic based sections (known as dossiers) and our regional gateways to give them greater prominence on the site. We have added different language options to our Latin America Gateway.
- Our new newsletter manager allows us to analyse the profile of our registered users and to send emails to groups of registered users selected on the basis or region, topic of interest and/or language.
- Correspondents can log in from any location and contribute content. Editors (also from any location) can edit and upload articles and send them for translation via the CMS if necessary.
- Our notices section is easier to update and manage and also now allows organisations to input their own job, event, grant or announcement.
- Our registered users can receive our weekly email alert that lists the latest additions to the website in English, Spanish, French and Chinese.
- The site is much more flexible in terms of managing how the content is displayed and we can now use right hand side column of the site to highlight new items, such as controversial articles, SciDev.Net jobs and events, and online discussions.

A practical guide to developing a new website

Redeveloping or redesigning a website is a large task, especially for a small organisation. But by planning, and putting forward clear guidelines on communication and a clear vision on what your organisation needs, the process can be made easier.

Stage 1: Planning

The first stage is to decide the parameters of the project.

- *Vision*: Develop a clear idea of what you want from the website. You can save money by having a clear idea about what you want.
- *Budget*: Be realistic about what you can get for your money. You should save some budget for maintenance and changes post-launch.
- *Length of time for the project*: Set a time frame for the project taking into account staff availability and their other responsibilities.
- *Schedule*: Develop a schedule based around the availability of staff involved in developing and testing content and consultation and decision-making.

- *Audience*: Assess who you want as your audience and what they will want from your site. Do a survey of selected users if necessary. This audience may be a subset of the main audience depending on their needs, access to internet or resources requirements.
- *Use outside contractors*: It is likely as a small organisation, you will seek your technical expertise outside. In-house teams may not have the technical expertise (or time) to develop the solution most appropriate to your needs. Seek recommendations from similar organisations.
- *Staff*: Appoint someone with the responsibility for pushing the project forward. However, some commitment is usually required by all staff, whether its writing/editing content, consulting on design or developing work flow plans.
- *Technical*: Seek advice on what solutions are available to you for your content management system (CMS). A system accessible via the website (by logging-in) is often preferable as it allows users to work from remote locations.

Stage 2: Developing the design and technical briefs

Your website is likely to have three elements: the database of content, the content management system (CMS) which interacts with the database and manages the content and the front-end design of the website. You don't need to spend too much time looking at the details of how the database will work so long as it meets your requirements for flexibility and access.

Design

It is useful to get some consensus within your organisation about how you want the website to look before developing the content management system (CMS). Bring key members together to discuss the organisation's vision for its website. This helps clarify how everyone sees the site and identifies key areas for change. Ask them to:

- Identify the areas of the current website they dislike and why.
- Identify areas of frustration in working with the current website.
- Discuss each persons favourite websites to identify common ideas on design.
- Define what image you want the website to give of your organisation.

Based on these discussions, you should write a design brief that details how you want the new site to look. It should outline the types of changes you require such as which old areas are to be removed, expanded or reduced and what new elements should be added. The design brief should indicate how the content elements fit together and how different areas of content are connected.

Content Management System (CMS)

A content management system (CMS) should be an easy to use system by which content can be added and managed without having to build individual pages. In order to get the CMS most appropriate for your organisation, you need to work closely with both the developers of the website and your organisation's staff.

1. Discuss with your organisation what the CMS will be used for. What content will be updated, how regularly and by whom. What areas of the website need to be

changed or rearranged on a regular basis. Discuss whether it should incorporate any internal editorial processes.

2. Develop a brief for your contractors based on these discussions with flow diagrams if necessary of how information flows in your organisation. You should discuss this in detail with your contractors to clarify any issues.

Stage 3: Developing the website

The design of the website and the development of the content management system (CMS) can happen in parallel. At this stage you will have delivered clear ideas and instructions on how you want both to be built.

The next stage will involve the contractors putting these ideas into practice. This is a crucial stage as you have to ensure the contractors have understood your requirements and are in tune with your thinking. Keep in constant contact and ask for regular progress reports. You may need to write supplementary documents or they may need to send more details on how they plan to proceed.

Both parties need to be prepared to have a degree of flexibility and compromise to ensure both are happy with how the project is proceeding. It is vital to document all conversations, emails and other material passed between you in case you need to refer to what has been decided between you.

Contractors should respond to your briefs with a detailed specification for the CMS, which will probably need more versions before you reach final agreement. They should present some first ideas on the website's design. Agree on a mechanism for feedback.

Ask for a first stage prototype of the CMS based on the specification. This should not be a final version and should be available to you to test (by inputting and managing information.) It will not be integrated with the front-end designs at this stage or the database that will store the information on your website. At the same time, you should be agreeing on the designs of the main areas of the site.

A second prototype should be developed following your feedback, for further testing. It should be an almost finished version. At this stage you should also be near final signoff on all designs for the website.

Finally, once feedback on the second prototype is complete, the website's new designs should be integrated with the site database and the CMS. Although not live yet, you should be able to use it as a working website to test under normal working conditions. You may need some extra time in this phase to re-input content from your old site.

You are now ready to launch the website. Make sure your contractors and in-house technical staff are readily available to respond to any immediate technical or display problems. By keeping back some of your budget, you will be able to afford adjustments to the website in response to user feedback over the coming months.